REMARKS

Claims 1, 3-21, 23, and 25-57 are currently pending in the subject application and are presently under consideration. Claims 2, 22 and 24 have been canceled pending entering of these amendments. Claims 1, 3, 6, 7, 21, 23, 25, 35, and 54 have been amended herein to correct minor informalities and/or to incorporate subject matter from dependent claims as originally filed. These amendments should be entered to simplify matters on appeal and/or to expedite prosecution. A version of all claims can be found at pages 2-11 of this Reply.

At page 3 of the Advisory Action (dated May 9, 2006) the Examiner improperly refused to enter amendments on grounds the amendments to claim 21 would require further consideration and a new grounds for rejection. Applicants' representative notes that amendments to claim 21 in the Reply to Final Office Action (filed March 30, 2006) expressly incorporated limitations from two dependent claims (*e.g.*, dependent claims 22 and 24), and therefore would not require further consideration and/or a new grounds for rejection. Accordingly, those amendments should have been entered.

Applicants' representative requests the Examiner provide a complete response to the arguments set forth herein. The Examiner did not provide a response to the arguments articulated in the Reply to Final Office Action in a manner necessary to simplify matters on appeal. In particular, applicants' representative requests the Examiner indicate which of the previous objections/rejections have been withdrawn as well as indicating allowable subject matter if any of the present rejections are maintained. Should the Examiner again refuse to enter these amendments, applicants' representative notes the Examiner must still provide a valid grounds for rejection for the amended subject matter or in the alternative indicate the dependent claims from which this subject matter was drawn is allowable.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Objection of Claims 55-57 Under 37 CFR 1.75(c)

Claims 55-57 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Withdrawal of this objection is respectfully requested for at least the following reasons. The subject claims are in proper dependent form. Claims 55-57 recite, "A computer-readable medium ... that ***executes*** the

method of ...." The Examiner incorrectly argues at page 2 of the Final Office Action (dated February 3, 2006) that these claims fail the "infringement test" because "what is needed is, for example, a CD-ROM having computer executable code that ***if and when executed would cause a computer to do the steps recited.***" The Examiner further argues that "such a CD-ROM would not infringe...since the CD-ROM itself never ***performs*** [*e.g.*, executes] any of the active steps required by the method of [the] claims." Contrary to the Examiner's statements that the computer-readable medium (*e.g.*, CD-ROM) never performs any of the active steps, the claims explicitly recite, a "computer-readable medium ... that ***executes*** the method of ...." Therefore, the computer-executable instructions are in fact executed, and thus, the recited steps are in fact performed. Accordingly, the subject claims do not fail the infringement test and this objection should be withdrawn.

II. Rejection of Claims 37-44 Under 35 U.S.C. §101

Claims 37-44 stand rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Withdrawal of this rejection is respectfully requested for at least the following reasons. The subject claims produce a useful, concrete and tangible result. Moreover, 35 U.S.C. § 101 does not require that "machines", "systems" or components of "machines" or "systems" be structural or physical components. Further, contrary to the Examiner's assertions, the claimed subject matter does in fact recite physical structure.

> Title 35, section 101, explains that an invention includes "any new and useful process, machine, manufacture or composition of matter."... Without question, ***software code alone qualifies as an invention eligible for patenting under these categories.*** *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1338-39 (Fed. Cir. 2005) (holding that 35 U.S.C. §101 did not limit "machines" or components of "machines" to ***structural*** or ***physical*** components. ***Rather, every component, including software components, of every form of invention deserves the protection of §271(f) because it is patentable subject matter under 35 U.S.C. §101***) (emphasis added).

At page 22 of the Final Office Action, the Examiner incorrectly attempts to limit the holding of *Eolas* to only method claims and article of manufacture claims. However, *Eolas*

expressly held that neither the statute nor the legislative history limits ***components*** of ***machines*** to something that is physical. *See id* at page 1340. Accordingly, the Examiner's argument that "applicants have claimed a 'system' comprising nothing more than computer code [and is therefore not patentable subject matter because there is nothing physical recited]" is in err and in direct contradiction to the CAFC. Moreover, the aforementioned statement is also in err because it improperly construes the claimed subject matter as only three "software" "components" (*see* Final Office Action, Page 3), whereas the instant claims cannot be so construed. In particular, independent claim 37 does not recite the term "component" which the Examiner relies upon to argue there is no physical structure. More particularly, independent claims 37, 38 and 43 all recite at least one of the following constituents: a welder, a remote system and welding consumable(s), none of which can be construed as "merely software" or "lacking anything physical." For at least the foregoing reasons this rejection of independent claims 37, 38 and 43, as well as the associated dependent claims, should be withdrawn.

III. Rejection of Claims 37-44 Under 35 U.S.C §112

Claims 37-44 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Withdrawal of this rejection is respectfully requested for at least the following reasons. The subject claims particularly point out and distinctly claim the subject matter which the applicants regard as the invention.

In particular, the subject claims recite a "system" in which the specification portion of the disclosure describes in full, clear, concise, and exact terms. One skilled in the art will readily ascertain a manner in which the claimed system can be used. At page 4 of the Final Office Action, the Examiner indicates that this rejection is based upon the 35 U.S.C. § 101 rejection above. The Examiner's rationale is that since a software component cannot be a "system" or a component of a "system", the claimed system is indefinite. As stated *supra*, contrary to the Examiner's assertions, a system need not contain physical structure. (*See id.*). Rather, a system claim can be comprised of software components (*e.g.*, components of a machine). Moreover, the instant claims recite at least one of a welder, a remote system and welding consumable(s), which do not lack physical characteristics. Accordingly, it is readily apparent that the claims are not indefinite, and this rejection of claims 37-44 should be withdrawn.

IV. Rejection of Claims 1, 3-9, 12, 15, 16, 21, 23, 25-27, 32, 33, 35, 37 and 54 Under 35 U.S.C. §103(a)

Claims 1, 3-9, 12, 15, 16, 21, 23, 25-27, 32, 33, 35, 37 and 54 stand rejected under 35 U.S.C. §103(a) as being unpatentable over B.J. Bennett "Using a microcomputer is costing and selling" (hereafter referred to as "Bennett") in view of Dialog File 148 "Retrospective" (hereafter referred to as "Dialog"). Withdrawal of this rejection is respectfully requested for at least the following reasons. Bennett and Dialog, either alone or in combination, do not teach or suggest all of the features set forth in the subject claims. Moreover, Bennett and Dialog are not enabling disclosures and, further, there is no motivation to combine Dialog with Bennett.

> To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) ***must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination*** and the reasonable expectation of success ***must be found in the prior art and not based on the Applicants' disclosure.*** *See In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The claimed subject matter relates to a system and method for managing welding consumables. In particular, independent claim 1 (and similarly independent claims 21 and 54) recites, "a remote system that interfaces ***to the welder via a computer network***, the remote system facilitates ***management of welding consumable(s)*** for the welder based at least in part upon information received from the consumable(s) monitor; ***the remote system facilitates ordering and/or purchasing of a consumable based at least in part upon information received from the consumable(s) monitor***." The cited references alone or when combined fail to teach or suggest such claimed aspects of the subject invention.

Bennett discloses two embodiments of hardware and software for use with the same portable microcomputer, a first phase device and a second phase device (*i.e.*, the "Parameter

Box"). The first phase device stores a series of parameters (*see* pg. 343, ll. 11-15), but does not teach or suggest that it monitors these parameters or that it monitors consumables. Rather, the first phase device calculates costing information utilizing data ***entirely provided via the keyboard*** (*i.e.*, based ***entirely*** upon user inputted values of the selected parameters). (*See* pg. 342, ll. 42-45; pg. 343, ll. 15-16). In essence, the first phase device is a calculator programmed with an algorithm to output costing information based entirely upon user input from the keyboard of the given parameters. These parameters are not monitored by the device, but instead the final values are input *via* the keyboard. Accordingly, it is readily apparent that the first phase device does not teach or suggest all the claim features, and need not be discussed further.

Bennett also discloses a second phase device that is the next generation of the first phase device. The "Parameter Box" (*i.e.*, the second phase device) is similar to the first phase device in that it is designed to be interfaced to and software compatible with the same host computer (of the portable microcomputer that can house either phase of the device). (*See* pg. 344, ll. 9-11). Another similarity between the first phase device and the "Parameter Box" is that virtually all parameters are supplied *via* the keyboard. (*See* pg. 344, ll. 13-20). However, unlike the first phase device, the "Parameter Box" can be used to monitor the weld process semi-automatically. (*See* pg. 342, ll. 45-47). In particular, a "device" can be used to measure a single welding consumable, which is the amount of wire consumed (*see* pg. 343, ll. 40-44), but all others must be input by a user *via* the keyboard. The "device" is a rotary impulse transducer wherein the "wire consumed" is a simple count which must be converted to a figure of actual wire length consumed. (*See* pg. 344, ll. 39-41). The "device" delivers data to the "Parameter Box" along a standard RS232 interface (*see* pg. 343, line 47-pg. 343, line 1), where "a lot of processing is done" (*see* pg. 344, line 37).

In essence, the Examiner argues that the transducer (*i.e.*, the "device") is the consumable(s) monitor of the subject claims, that the "Parameter Box" is the remote system, and that the RS232 interface is the computer network. (*See* Final Office Action dated February 3, 2006, at pages 5-6) However, the "Parameter Box" (*e.g.*, remote system) does not interface ***to the welder*** as recited in the subject claims, but rather interfaces to the transducer. Therefore, assuming *arguendo* that a "Parameter Box" is a remote system, Bennett still does not teach or suggest *a remote system that interfaces **to the welder***, but instead teaches *a remote system that interfaces **to the transducer***. Secondly, the "Parameter Box" interfaces the transducer by way of

a RS232 connection. RS232 is not ***a computer network***, but rather a serial connection that does not define elements such as character encoding, framing of characters, bits per character, start/stop bits, bit parity, *etc*, at least a subset of which are necessary for a computer network. Thus, Bennett does not teach or suggest a remote system that interfaces to the welder *via* ***a computer network***, but instead discloses *via* ***an RS232 connection***, which is materially distinct from a computer network. Accordingly, Bennett fails to teach or suggest all the claim limitations, and for at least the foregoing reasons this rejection should be withdrawn.

In addition, the "Parameter Box" outputs projected costing results to an LCD or to a large television screen (*see* pg. 344, ll. 34-36), but facilitates neither ***management of welding consumable(s)*** nor ***ordering and/or purchasing of a consumable based at least in part upon information received from the consumable(s) monitor***. The Examiner incorrectly argues that these features are taught simply because the reference implies that the output produced by the "Parameter Box" (*see* Fig. 1) can be employed by a "welding engineer to present a clear case to purchasing department." Presenting a clear case to purchasing department is materially distinct from ***management of welding consumable(s)*** and ***ordering and/or purchasing of a consumable***. Moreover, even if presenting a clear case to purchasing department were sufficient to teach or suggest management and ordering of welding consumable(s), such a proposition necessarily implies it is the purchasing department that facilitates the management and ordering, and the *purchasing department* is not *the remote system that interfaces to the welder* as recited in the subject claims. Furthermore, both the management and ordering and/or purchasing of a consumable is ***based at least in part upon information received from the consumable(s) monitor***, whereas the Examiner ostensibly suggests that the hypothetical management and ordering is a result of the presentation of a clear case by the welding engineer. However, the welding engineer is not a consumable(s) monitor of a welder, so the Examiner's analysis fails in yet another way.

Applicants' representative further submits that Bennett is non-enabling with respect to converting a simple count to a figure of actual wire length consumed because this capability is only named. For example, none of the parameters input *via* the keyboard (*see* pg. 343, ll. 17-29; pg. 344, ll. 14-20) or what is stored in CMOS RAM (*see* pg. 343, ll. 7-16) can be used to determine how this is done. Merely naming or describing the said conversion is insufficient to provide an enabling disclosure (*see Elan Pharm., Inc. v. Mayo Found. For Med. Educ. &*

Research, 346 F.3d 1051, 1054, 68 USPQ2d 1373, 1376 (Fed. Cir. 2003)). Therefore, Bennett effectively teaches a transducer that transmits *a simple count* but does not teach or suggest a consumable(s) monitor that transmits *welding consumable(s) information.* A simple count is patentably distinct from welding consumable(s) information. Furthermore, Bennett is not an enabling disclosure with respect to ***management of welding consumable(s) for the welder*** and ***ordering and/or purchasing of a consumable*** because these aspects are not even named or described, but rather hypothesized by the Examiner on the basis that certain costing estimates can be calculated and output to an LCD from which a human actor, *e.g.*, in the purchasing department, might decide to take some action.

Applicants' claimed invention further relates to multiple-systems and multiple networks for managing welding consumables, determining ordering levels and ordering consumable(s). In particular, independent claim 21 recites, "***a local system*** operatively coupled to the welder *via a* ***first computer network***, ... and ***a remote system*** operatively coupled to the local system *via a* ***second computer network*** ... the local system ***initiates orders*** from the remote system based at least in part upon information received from the consumable(s) monitor." Further, independent claim 37 recites, "means for ***determining ordering levels for a consumable***; and means for ***ordering a consumable*** based at least in part upon the monitored consumable usage." The cited references alone or when combined fail to teach or suggest such claimed aspects of the subject invention.

As described above, Bennett does not disclose even a single ***computer network*** (but rather an RS232 connection that lacks the standards necessary to implement a computer network), let alone a first computer network and a second computer network. Moreover, the Examiner is implicitly relying upon the "Parameter Box" to represent both the local system and the remote system of the subject claims. (*See* Final Office Action, Page 9). The "Parameter Box" cannot be the local system because it is not ***operatively couple to the welder***, and certainly cannot be both the local system and the remote system that is ***operatively coupled to the local system via a second computer network***. As well, Bennett does not teach or suggest a local system, let alone ***a local system that initiates orders*** from the remote system. Furthermore, Bennett does not teach or suggest any means for ***determining ordering levels for a consumable***; or any means for ***ordering a consumable***. At most, Bennett teaches that the length of wire consumed can be calculated (although applicants' representative argues this is not enabled by the

disclosure). Even so, the amount of wire consumed does not implicate the amount of wire remaining (especially considering no starting or inventory amount of wire is ever input or determined) much less an ***ordering level for a consumable***. Likewise, Bennett is silent with respect to ***ordering a consumable***.

Moreover, the secondary reference, Dialog, is also a non-enabling reference for the aspects upon which it is relied. Dialog discloses transmitting data for the purpose of monitoring the quality of welds *via* the Internet. However, the reference does not enable or otherwise explain how to monitor the quality of welds *via* the Internet. Thus, the reference is non-enabling with respect to monitoring the quality of welds *via* the Internet because these features are only named or described. (*See id.*) Therefore, Dialog is an improper reference as well.

Further, the Examiner has impermissibly employed hindsight analysis in order to locate a reference that discloses "a remote system that interfaces to the welder ***via a computer network***". As conceded at page 6 of the Final Office Action, Bennett does not disclose these features, yet the Examiner attempts to reference Dialog to make up for this deficiency. Dialog discloses transmitting data for the purpose of ***monitoring the quality of welds*** *via* the Internet, whereas Bennett is directed toward costing analysis and does not disclose, teach or suggest the ability the necessary equipment, or a purpose to be met by monitoring the quality of welds. The motivation to combine these references supplied at page 6 of the Final Office Action is "to remotely monitor the status of a weld". However, since neither Bennett nor Dialog teach, suggest and/or enable how to monitor the quality of welds, the stated motivation to combine fails on its face. Additionally, Bennett discloses that a simple count can be transmitted by a transducer to the "Parameter Box" *via* an RS232 connection. Moreover, one skilled in the art would not be motivated to upgrade an RS232 serial connection to a more extensive communication network when the data sought to be transmitted is a simple count from a transducer.

For at least the foregoing reasons, the Examiner has failed to make a *prima facie* case of obviousness. Based upon the aforementioned deficiencies of either or both of the references, the combination fails to teach or suggest all the claimed features of the instant claims Accordingly, this rejection of independent claims 1, 21, 37 and 54, as well as all associated dependent claims, should be withdrawn.

V. **Rejection of Claims 10, 11, 17-19 and 36 Under 35 U.S.C. §103(a)**

Claims 10, 11, 17-19 and 36 stand rejected under 35 U.S.C. §103(a) as being unpatentable over B.J. Bennett "Using a microcomputer is costing and selling" (hereafter referred to as "Bennett") in view of Dialog File 148 "Retrospective" (hereafter referred to as "Dialog") and further in view of Tarr, *et al.* (U.S. 5,184,179) (hereafter referred to as "Tarr"). Withdrawal of this rejection is respectfully requested for at least the following reasons. Bennett, Dialog, and Tarr either alone or in combination, do not teach or suggest all of the features set forth in the subject claims.

As detailed above, Bennett and Dialog fail to teach or suggest all the claimed features of independent claims 1 and 21 upon which the subject claims depend. Tarr, which relates to a system for monitoring a paper processing device, counting the number of papers processed and diagnosing malfunctions within the device does not make up for these deficiencies. Accordingly, Bennett and Dialog when combined with Tarr fail to teach or suggest all the claimed aspects and this rejection should be withdrawn.

VI. **Rejection of Claims 13, 14 and 34 Under 35 U.S.C. §103(a)**

Claims 13, 14 and 34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over B.J. Bennett "Using a microcomputer is costing and selling" (hereafter referred to as "Bennett") in view of Dialog File 148 "Retrospective" (hereafter referred to as "Dialog") and further in view of Official Notice. Withdrawal of this rejection is respectfully requested for at least the following reasons. Bennett and Dialog, either alone or in combination, do not teach or suggest all of the features set forth in independent claims 1 and 21 upon which the subject claims depend. Official Notice does not remedy the shortcomings of the cited art and this rejection should be withdrawn.

In addition, dependent claim 13 recites, "information exchanged between the welder and the remote system includes at least one of HTML, SHTML, VB Script, JAVA, CGI Script, JAVA Script, dynamic HTML, ASP, ActiveX, XML, PDF, EDI and WML format." Dependent claim 14 recites, "at least one of a LAN, a phone connection and a gateway to couple the welder and/or the remote system to the network." At page 12 of the Final Office Action the Examiner takes Official Notice that it is old and well known in the art 1) to use HTML format to exchange information and, 2) to use a LAN connection to connect two or more devices. It is respectfully

submitted that these Official Notices are not pertinent to the subject claims or to the Examiner's rejection. For example, Bennett explicitly discloses a standard RS232 interface is employed and does not teach or suggest any reason why a more sophisticated interface might be used to transmit a simple count. Neither HTML nor any of the aforementioned language, protocols, standards and/or formats can be exchanged over an RS232 connection. Likewise, an RS232 interface is a serial connection that cannot implement a LAN. Accordingly, this Official Notice is improper and this rejection should be withdrawn.

VII. Rejection of Claims 20 and 28-31 Under 35 U.S.C. §103(a)

Claims 20 and 28-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over B.J. Bennett "Using a microcomputer is costing and selling" (hereafter referred to as "Bennett") in view of Dialog File 148 "Retrospective" (hereafter referred to as "Dialog") and further in view of Sekizawa (U.S. 6,681,349 B2). Withdrawal of this rejection is respectfully requested for at least the following reasons. Bennett, Dialog, and Sekizawa either alone or in combination, do not teach or suggest all of the features set forth in the subject claims.

As detailed *supra*, Bennett and Dialog fail to teach or suggest all the claimed features of independent claims 1 and 21 upon which the subject claims depend. Sekizawa which relates to monitoring the state of a printer does not make up for these deficiencies. Accordingly, the combination of Sekizawa is insufficient to remedy to the shortcomings of Bennett and Dialog and withdrawal of this rejection is respectfully requested.

VIII. Rejection of Claim 24 Under 35 U.S.C. §103(a)

Claim 24 stands rejected under 35 U.S.C. §103(a) as being unpatentable over B.J. Bennett "Using a microcomputer is costing and selling" (hereafter referred to as "Bennett") in view of Dialog File 148 "Retrospective" (hereafter referred to as "Dialog") and further in view of Manchala, *et al.* (U.S. 6,405,178 B1) (hereafter referred to as "Manchala"). Bennett, Dialog, and Manchala either alone or in combination, do not teach or suggest all of the features set forth in the subject claims.

Manchala, which relates to a system for automatically ordering consumables for a printer, does not remedy the aforementioned shortcomings with respect to the combination of Bennett

and Dialog. Accordingly, further combining Manchala is not sufficient to overcome these deficiencies and this rejection should be withdrawn.

IX. Rejection of Claims 38 and 40-42 Under 35 U.S.C. §103(a)

Claims 38 and 40-42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over B.J. Bennett "Using a microcomputer is costing and selling" (hereafter referred to as "Bennett"). It is requested that this rejection be withdrawn for at least the following reasons. Bennett does not teach or suggest all of the features set forth in the subject claims.

Independent claim 38 recites, "a consumable monitor component ... a customer component that ... facilitate ***welding resource management*** ... and a supplier component that receives information from the customer component to facilitate ***purchasing and/or ordering of welding consumable(s)***." As with the rejections of independent claims 1 and 21 above, the Examiner again argues at page 15 of the Final Office Action that Bennett discloses all the components recited in the subject claims. Accordingly, this rejection of independent claim 38 and dependent claims 40-42 should be withdrawn for at least the same reasons detailed regarding the rejection of independent claims 1 and 21. In particular, applicants' representative again respectfully submits that the "Parameter Box" of Bennett cannot be the customer component because it does not facilitate ***welding resource management*** but rather outputs results to an LCD, which is materially distinct. Secondly, Bennett does not disclose or teach any element that can be likened to the supplier component because Bennett does not teach or suggest 1) purchasing and/or ordering of welding consumable(s); and 2) a component that receives information from the "Parameter Box" even if it is deemed identical to the customer component.

The Examiner clearly indicates that at page 15 of the Final Office Action that his analysis relies on construing a human actor as a component of a machine. That is, the Examiner argues that a "welding engineer" in communication with "purchasing department" constitutes a ***supplier component*** of the subject claims. Such analysis is impermissible and this rejection should be withdrawn.

X. Rejection of Claims 39, 43, 45, 46, 48-53 and 55-57 Under 35 U.S.C. §103(a)

Claims 39, 43, 45, 46, 48-53 and 55-57 stand rejected under 35 U.S.C. §103(a) as being unpatentable over B.J. Bennett "Using a microcomputer is costing and selling" (hereafter

referred to as "Bennett") in view of Manchala, *et al.* (U.S. 6,405,178 B1, hereinafter referred to as "Manchala"). Withdrawal of this rejection is respectfully requested for at least the following reasons. As described above, Bennett fails to teach or suggest all the claimed features upon which the Examiner relies to set forth this rejection. The combination of Manchala, *et al.*, does not remedy the aforementioned deficiencies with respect to Bennett. Moreover, Manchala is non-analogous art and/or there is no motivation to combine Manchala with Bennett in the manner the Examiner suggests because the combination would require substantial reconstruction and redesign requiring the use of hindsight to arrive at claimed subject matter.

Claim 39

Claim 39 depends from independent claim 38, which is believed to be allowable for at least the reasons discussed *supra*. Manchala does not make up for the aforementioned deficiencies of Bennett. Accordingly, the Examiner has failed to make a *prima facie* case for obviousness regarding this claim.

Independent claim 43

At pages 17 and 18 of the Final Office Action, the Examiner argues that Bennett discloses 1) a consumable monitor, 2) an aggregation component...that receives welding information from the consumable monitor, and 3) a supplier component that receives the consumable reorder to facilitate purchasing and/or ordering of welding consumable(s). However, Bennett discloses none of these elements as recited in the claims and detailed above. For at least the reasons submitted with respect to independent claims 1 and 21, Bennett fails to teach or suggest all the claim features of independent claim 43 and Manchala is insufficient to remedy this shortcoming.

Furthermore, the Examiner incorporates the teachings of Manchala which describe components for *printers*, to represent five additional structural components for *welders*. The Examiner seeks to suggest that because Manchala can, *e.g.*, monitor how much printer ink is left in a printer, therefore the combination with Bennett transforms this functionality as well as the printer components to functionality for welders and welding components, respectively. It is respectfully submitted that applicants' do not broadly claim the monitoring of consumables, but rather monitoring *consumable usage and/or consumable status of a welder*. Neither Bennett nor

Manchala teach or suggest the components recited in the instant claim that relate to monitoring *consumable usage and/or consumable status of a welder*. Accordingly, the combination of these references cannot be said to do so either.

In addition, to suggest the combination of five additional printer components with Bennett, of which Bennett does not teach or suggest the hardware or software capabilities to incorporate is improper even if there were some reasonable motivation to do so. For example, Bennett teaches a battery operated portable microcomputer with sufficient CMOS RAM such that the software could be left resident in the machine (*see* pg. 343, ll. 7-8), which is about 16 kilobytes of CMOS RAM. (*See* pg. 344, ln. 31). Bennett does not teach or suggest more sophisticated types of RAM storage or hardware component necessary to employ the teachings of Manchala, *et al.* Thus, to incorporate the teachings of Manchala into Bennett would require substantial reconstruction or redesign of the storage capabilities of the portable microcomputer as well as the addition of five structural components the Examiner purports are taught in Manchala.

Moreover, Manchala is directed toward an *electronic commerce enabled* purchasing system for a *printer*, whereas Bennett expressly teaches providing a local LCD or TV display or a *hardcopy* 40-column printout of costing results from *welding equipment* (*see* pg. 343, ll. 33-34). Hence, incorporating Manchala with Bennett would require substantial reconstruction and redesign as well as change the principle of operation of the reference being modified (*e.g.*, the principal operation of a local output or display versus an e-commerce system). Thus, the teachings of the references are not sufficient to render the claims *prima facie* obvious. (*See* MPEP § 2143.01(VI), "the suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate"). Accordingly, this rejection of independent claim 43 should be withdrawn.

Claims 45, 46, 48-53 and 55-57

Claims 45, 46, 48-53 and 55-57 are believed to be allowable for at least the reasons discussed *supra*. Neither Bennett nor Manchala, alone or when combined, disclose, teach or suggest all the claim features of the subject claims. Accordingly, applicants' representative requests that the Examiner withdraw this rejection.

XI. Rejection of Claims 44 and 47 Under 35 U.S.C. §103(a)

Claims 44 and 47 stand rejected under 35 U.S.C. §103(a) as being unpatentable over B.J. Bennett "Using a microcomputer is costing and selling" (hereafter referred to as "Bennett") in view of Manchala, *et al.* (U.S. 6,405,178 B1, hereafter referred to as "Manchala") in view of Official Notice. Withdrawal of this rejection is respectfully requested for at least the following reasons. Bennett and Manchala, either alone or in combination, do not teach or suggest all of the features set forth in independent claims 43 and 44 upon which the subject claims depend. Official Notice does not remedy the shortcomings of the cited art and is therefore moot. Accordingly, this rejection should be withdrawn.

CONCLUSION

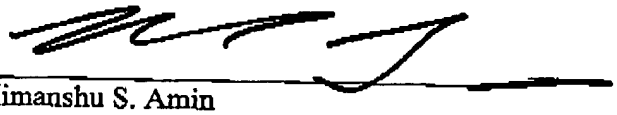
The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [LINCP105US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

AMIN, TUROCY & CALVIN, LLP



Himanshu S. Amin
Reg. No. 40,894

AMIN, TUROCY & CALVIN, LLP
24TH Floor, National City Center
1900 E. 9TH Street
Cleveland, Ohio 44114
Telephone (216) 696-8730
Facsimile (216) 696-8731